JOINT MESSAGEFORM

SECURITY CLASSIFICA [redacted]

CLASSIFICATION CHANGED TO [redacted] LIV

By Authority of AFR 205-2

Eugene McIntyre 7 APR 1965

FTASC
B030426
Cy 2076

PRECEDENCE	TYPE MSG (Check)			ACCOUNTING SYMBOL	ORIG. OR REFERS TO	CLASSIFICATION OF REFERENCE
	BOOK	MULTI	SINGLE			
ACTION						
INFO						

FROM:

6595 AEROSPACE TEST WG VANDENBERG AFB, CALIF.

SPECIAL INSTRUCTIONS

TO:

SPACE SYSTEMS DIV LOS A CALIF
VWZD - 26-10-291-S

SUBJECT: 8 HOUR LAUNCH FLASH REPORT

1. A SATELLITE VEHICLE CONSISTING OF SLV-2 BOOSTER NO. 353 AND A S-01A ORBITAL STAGE NO. 1401 WAS LAUNCHED ON THE SECOND ATTEMPT FROM VAFB COMPLEX 75-1 PAD 2 AT 0914:39.20 PDT ON 26 OCTOBER 1962. THE PRIMARY LAUNCH OBJECTIVE, TO PLACE THE S-01 SATELLITE WITH PAYLOAD IN A ECCENTRIC ORBIT WITH AN INCLINATION OF 70 DEG WAS ACCOMPLISHED. THE VTS RADAR PLOTBOARD INDICATED APPROXIMATE NOMINAL TRAJECTORY UP TO LOSS OF RADAR TRACK SHORTLY BEFORE AGENA SHUTDOWN. PRELIMINARY ORBITAL PARAMETERS ARE REPORTED AS:

	NOMINAL	ACTUAL
PERIGEE (NM)	114.27	109
APOGEE (NM)	3036.31	3069
PERIOD (MIN)	148.58	149.1
INCLINATION (DEG)	69.92	70.0

DATE 26 | TIME

MONTH Oct | YEAR 1962

WRITER

TYPED NAME AND TITLE (Signature, if required)

PHONE | PAGE NR. | NR. OF PAGES

SECURITY CLASSIFICATION

[redacted] LT, COL. USAF

[redacted]

RELEASER

SIGNATURE

TYPED (or stamped) NAME AND TITLE

DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS
DOD DIRECTIVE 5200.10

DD FORM 1 MAY 55 173 REPLACES DD FORM 173, 1 OCT 49, WHICH WILL BE USED UNTIL EXHAUSTED

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FROM:

6595 AEROSPACE TEST WG VANDENBERG AFB, CALIF. [redacted]

PRELIMINARY VALUES OF SIGNIFICANT LAUNCH EVENTS ARE:

LIFTOFF 0914:59.20 PST	ZERO	
STEERING INITIATED	90.95 SEC	
MECO (S1)	147.76 SEC	(PROPELLANT DEPLETION)
VECO	156.70 SEC	
ENABLE D1 AND D2 (S2)	183.05 SEC	
D1 CUT	155.28 SEC	
D2 CUT	158.17 SEC	
D2 CUT	158.30 SEC	
SEPARATION COMMAND (S3)	168.48 SEC	
SEPARATION COMPLETE	169.06 SEC	
ULLAGE ROCKET IGNITION	171.4 SEC	
S-01A ENGINE IGNITION	188.46 SEC	
S-01A THRUST ATTAINMENT (90 PER CENT Pc)	190.5 SEC	
S-01A BURNOUT (70 PER CENT Pc)	199.63SEC	
S-01A LINK 2 TELEMETRY ACQUISITION	441.65 SEC	
S-01A LINK 3 TELEMETRY ACQUISITION	484 SEC	
VIS VERLORT RADAR FADE	462 SEC	
VIS TELEMETRY DATA FADE (LINK 1)	439 SEC	
ZOMBIE ACTIVE	478 SEC	
	338 SEC	

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FROM:

6595 AEROSPACE TEST WG VANDENBERG AFB, CALIF. [redacted]

ZEBRDR PAERVT

512 SEC

II. ALL SLV-2 SUBSYSTEMS PERFORMED SATISFACTORILY AND, IN RESPONSE TO GROUND GUIDANCE SYSTEM COMMANDS, PROVIDED ADEQUATE COAST APOGEE TRAJECTORY CONDITIONS.

THE S/S S-81A LATERAL AND NORMAL ACCELEROMETERS INDICATED THAT THE 30 CPS OSCILLATIONS DURING THE SLV-2 BOOST PHASE, WERE SIGNIFICANTLY GREATER IN AMPLITUDE THAN THAT OBSERVED ON ANY PREVIOUS SLV-2/01 VEHICLE.

GROUND GUIDANCE SYSTEM DATA INDICATE THAT COAST APOGEE ALTITUDE WAS 106.7 NM (NOMINAL: 107.9 NM) AND THE VELOCITY WAS 10,325 FPS (NOMINAL: 10,282 FPS). THE SLV-2 WAS INTENTIONALLY ALLOWED TO GO TO PROPELLANT DEPLETION FOR MAXIMUM ENERGY FROM THE BOOSTER. THUS, THE COAST APOGEE CONDITIONS EXCEEDED P PREDICTED VALUES.

III. ALL S-01A VEHICLE SUBSYSTEMS PERFORMED SATISFACTORILY DURING LAUNCH TO PROVIDE THE PROPER TRAJECTORY CONDITIONS AT S-01 ENGINE SHUTDOWN. THE VELOCITY METER INDICATED A TOTAL ORBITAL STAGE VELOCITY GAIN OF 18,689 FPS, AS COMPARED WITH THE THEORETICAL VELOCITY GAIN CAPABILITY OF 18,640 FPS WITH A NOMINAL ENGINE. SHUTDOWN OCCURRED BY PROPELLANT DEPLETION, AS PLANNED.

HEAVY EXTRANEOUS RADAR INTERFERENCE PENETRATED THE S-01A BEACON RECEIVER CHANNEL TO PARTIAL OR FULL ACTIVITY LEVEL

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FROM:
6595 AEROSPACE TEST WG VANDENBERG AFB, CALIF [redacted]

TO PEAKS IN EXCESS OF 1600 PPS. THE INTERFERENCE EXTENDED FROM T+20 SEC TO T+425 SEC. LIGHT INTERFERENCE IN THE BEACON TRANSMITTER CHANNEL WAS ALSO PRESENT. THE MOD II VERLORT RADAR EXPERIENCED PULSE JITTER AND COUNTDOWN ON THE BEACON RETURN SIGNAL BUT MANAGED TO MAINTAIN AUTO-TRACK THROUGHOUT THE TRACKING PERIOD.

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FROM: [redacted]

V. COUNTDOWN

VEHICLE 353/1401 WAS LAUNCHED ON THE SECOND COUNTDOWN ATTEMPT FROM LAUNCH COMPLEX 75-1, PAD 2, AT 0914:31.20 PDT.

THE FIRST COUNTDOWN WAS INITIATED AT 0001 PDT ON 24 OCTOBER 1962. IT WAS CANCELLED IN TASK 11 AT 0530 DUE TO A MALFUNCTION IN THE PAYLOAD TELEMETRY SYSTEM POWER SUPPLY. DURING THE COUNTDOWN, ONE TECHNICAL HOLD WAS IMPOSED FROM 0505 TO 0530. THE FOLLOWING PROBLEMS OCCURRED:

a. IN TASK 4, IT WAS FOUND THAT THE S-01A PAYLOAD TELEMETRY LINK NO. 2 HAD NOT BEEN CONNECTED TO AN EXTERNAL ANTENNA. A COAXIAL CABLE WAS PROVIDED BETWEEN THE PAD ANTENNA TOWER AND THE VEHICLE. THIS OPERATION REQUIRED APPROXIMATELY 1 HOUR, BUT DURING THIS PERIOD WORK WAS PERFORMED ON OTHER TASKS.

b. LATER IN TASK 6 (0445), THE TELEMETRY LINK NO. 2 SIGNAL WAS FOUND TO BE ERRATIC. THE LAUNCH WAS CANCELLED AT 0530 DUE TO THIS PROBLEM AND WAS RESCHEDULED FOR 25 OCTOBER. (LATER, HOWEVER, THE LAUNCH WAS RESCHEDULED FOR 24 OCTOBER DUE TO INABILITY TO RESOLVE THE PAYLOAD TELEMETRY PROBLEM.)

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c. DURING EVALUATION OF THE INCIDENT PROBLEM, WEATHER REPORTS FORECASTED HEAVY FOG DURING THE SCHEDULED LAUNCH PERIOD, MAKING IT IMPOSSIBLE TO OBTAIN MANDATORY OPTICAL COVERAGE. A HOLD WAS IMPOSED AT T-175 MIN (0505) (START OF PROPELLANT LOADING) DUE TO WEATHER.

d. AT 0456 PDT, ALL FACILITY POWER AT THE BLOCKHOUSE AND PAD WAS LOST DUE TO AN ACCIDENT WITH A PERSONNEL HIGH LIFT. THE BOOM OF THE HIGH LIFT ENCOUNTERED A POWER LINE WHILE REPAIRS WERE BEING MADE TO THE HIGH LIFT. NO INJURIES RESULTED, HOWEVER, BUT THE FACILITIES HAD TO BE TRANSFERRED FROM COMMERCIAL TO AUXILIARY POWER DUE TO THE DAMAGED POWER LINE. SINCE AGE AND VEHICLE WERE ALREADY ON AUXILIARY POWER, THEIR STATUS WAS NOT AFFECTED BY THE LOSS OF COMMERCIAL POWER.

THE FINAL COUNTDOWN WAS INITIATED AT 0200 PDT, 26 OCTOBER. ONE HOLD OF 1 HR 18 MIN WAS IMPOSED AT T-15 MIN (0745 TO 0903) FOR RANGE CLEARANCE (TRAINS AND WEATHER) AND PAD SAFETY. TASKS 1 THROUGH 5 WERE COMPLETED IN AFTERNOON OF 25 OCTOBER IN ANTICIPATION OF

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FROM: [redacted]

INTERFERENCE WITH ANOTHER LAUNCH OPERATION. THE FOLLOWING PROBLEMS WERE ENCOUNTERED:

1. RADAR SAFETY RELATED OPERATIONS IN TASK 6 DUE TO LAUNCH OF ANOTHER VEHICLE.

2. IN TASK 12 (0930), A LEAK OCCURRED IN THE LMSC FUEL FILL LINE. LINE WHERE THE FLEX PORTION OF THE LINE JOINS A METAL FITTING WHICH THREADS TO REVETMENT HARDWARE. THE LINE WAS REPLACED. FUEL WAS DRAINED BACK TO THE TRANSFER SET AND THE LOADING OPERATION REPEATED.

3. IN TASK 13, A FIRE TRUCK STALLED ON THE LAUNCH PAD AND WAS REMOVED BY A TOW TRUCK.

4. IN TASK 14, LMSC AGE FUEL AND OXIDIZER PRESURE REGULATORS AT THE PAD REQUIRED READJUSTMENT.

5. THE TIMING SIGNAL OR LANDLINE DATA WAS IN ERROR BY APPROXIMATELY 4 HRS 3 MIN.

6. THE LIFTOFF SIGNAL WAS NOT PROPERLY GENERATED. THE UMBILICALS RELEASED BY THE BACK-UP (FLY-AWAY) METHOD.

VI. PAD DAMAGE

A. THERE WAS A SMALL AFTER-FIRE AT THE BASE OF THE LAUNCHER. PRELIMINARY EXAMINATION INDICATES NORMAL PAD DAMAGE.

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13 JAN 1955